Abstract

The objectives of this research are to find whether the US and Japan exports to China are determined by Chinese GDP growth and the value of Yuan, to find whether the US, China exports to Japan are determined by Japanese GDP growth and value of Yen and to find whether China, Japan exports to the US are determined by the US GDP growth and the value of Dollar.

Quarterly time series and cross-section data (from Q1 1994 to Q1 2003) are used to estimate the elasticities with linear regression method. F-test, T-tset, Residual-test and VIF are used to analyze the significance of the results of this research.

The results indicate that the China's real trade value has strong relationship with the change of the US and Japan's income. The income elasticity of demand for Chinese imports from the US is 0.519. The income elasticity for Chinese exports to the US is 3.854. Also, the income elasticity for Chinese imports from Japan is 0.796 and the income elasticity of demand for Chinese exports to Japan 4.316. The study also found that the Japanese goods have strong relationship with the change of the US income. The elasticity is 1.048.

Finally, this study found the Japan and the US real trade value has strong relationship with each other's real exchange rate. The price elasticities for the US Dollar against Japanese Yen is 0.354, for Yen against Dollar is 0.709 (absolute value). The sum of two price elasticities is larger than 1, and the Marshall Lerner Condition is hold.

Compared with the aggregate elasticities shown in some empirical studies, the higher income elasticities for Chinese exports to the US and Japan implicate that Chinese goods has strong competitiveness in the US and Japan market relative to other competitors.

This research found that the Japanese goods has less competitiveness in the US market relative to other competitors by comparing its income elasticity for exports to the US with the income elasticity for US aggregate imports.

The Japanese goods has less competitiveness than other competitors in the US and Chinese market and the U.S goods has less competitiveness than other competitors in the Chinese market are due to there is a reorganization of production on a worldwide basis.

The U.S and Japanese government should recognize this trend.

Japan must reform its financial market so that it can enhance the competitiveness of Japanese goods in the U.S and Chinese markets.

When Japan or the U.S regulates its trade deficit, they must consider that the relative price effect of devaluation should dominate the three effects: 1.The reverse absorption effect, 2.The pass-through effect, 3.The inflation effect, otherwise, the overall effects of devaluation on the trade balance become uncertain.